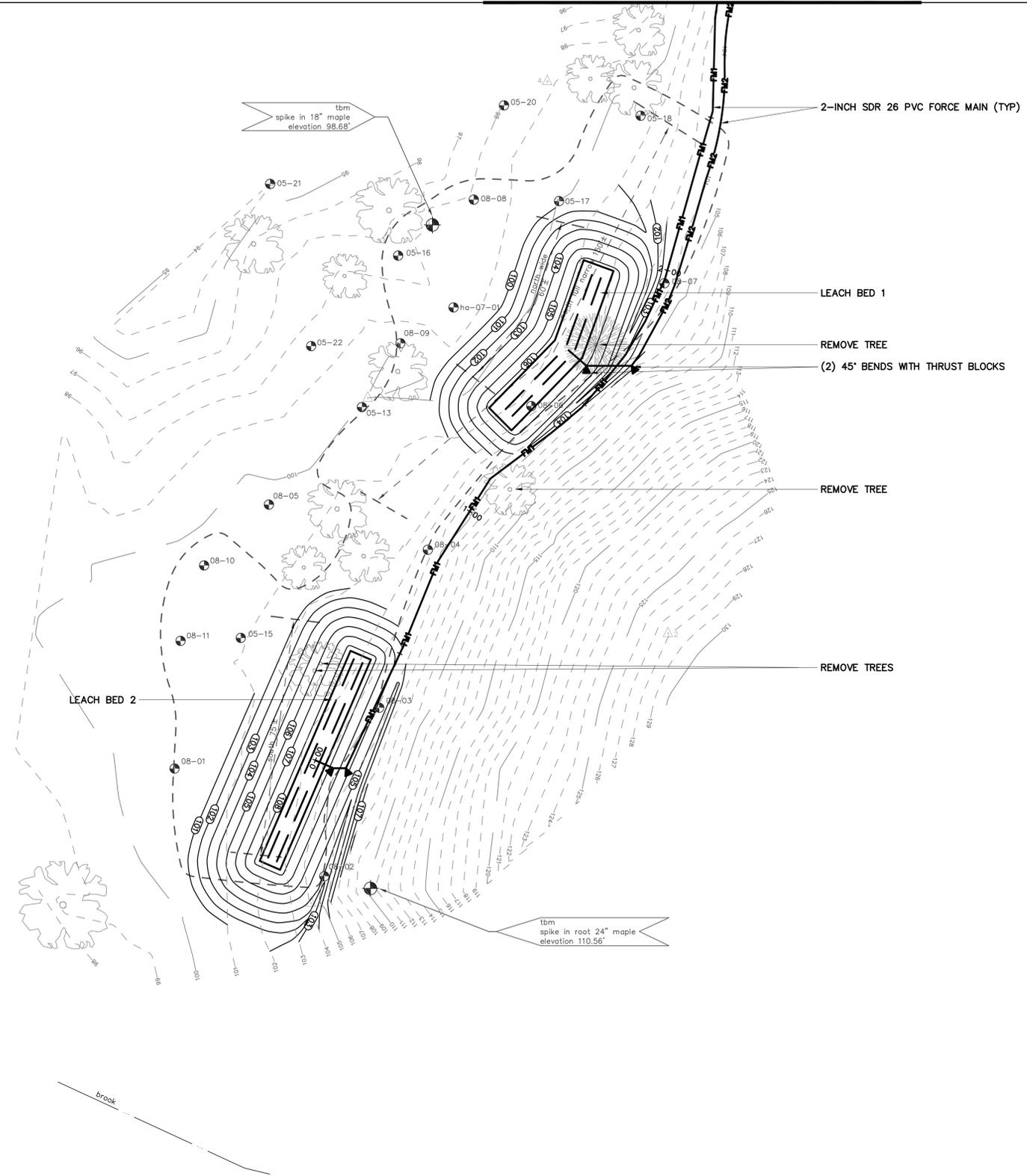
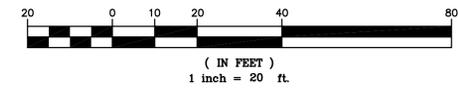


PROJECT LOCATION

LEGEND

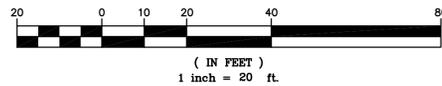
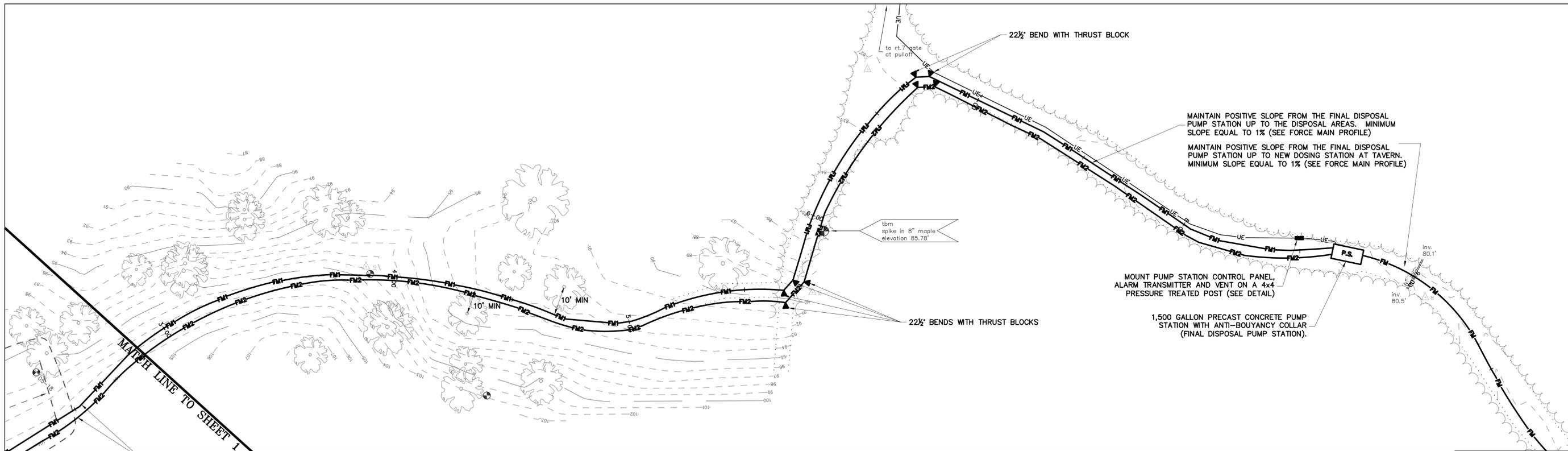
	boundary line
	chain link fence
	rail fence
	stonewall
	road/parking (w/ surface label)
	drive (w/ surface label)
	tree line/hedge row
	1 foot contour
	5 foot contour
	underground electric
	ditch line/drainage
	water line
	sanitary sewer
	edge lake, river, stream
	culvert
	traverse station
	temporary bench mark
	tree (type & size noted)
	bush
	monument found
	light pole
	test pit
	telephone box
	electrical box
	well
	SANITARY SEWER (SIZE NOTED)
	UNDERGROUND ELECTRIC
	FORCE MAIN (SIZE NOTED)
	FINISH GRADE
	CLEAN OUT

NOTE: EXISTING INFORMATION IS SHOWN IN LOWER CASE.
PROPOSED INFORMATION IS SHOWN IN UPPER CASE.



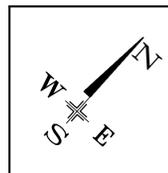
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	SCALE: 1" = 20'				
	DATE: 8/1/08	CK'D BY: JA			

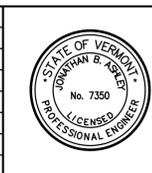


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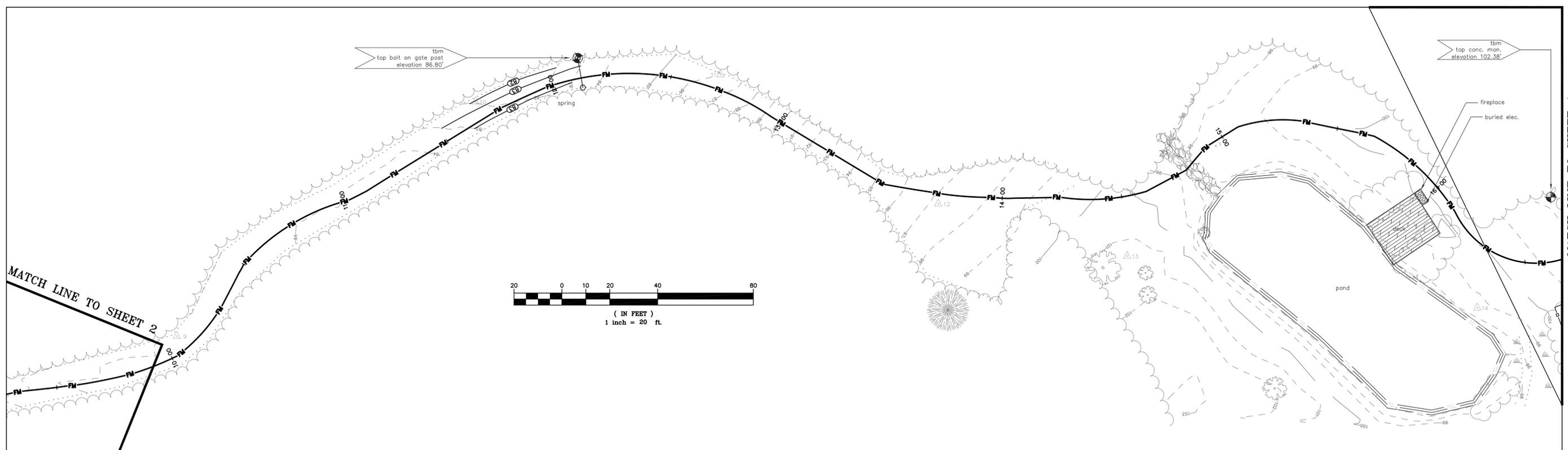
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**HAPPY PATRICK
1812 TAVERN
SEPTIC SYSTEM IMPROVEMENTS
CHURCH HILL ROAD
CHARLOTTE, VERMONT**

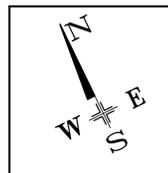
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DATE: 8/01/08	CK'D BY: JA		

SITE PLAN

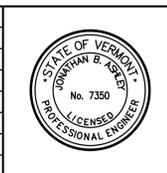


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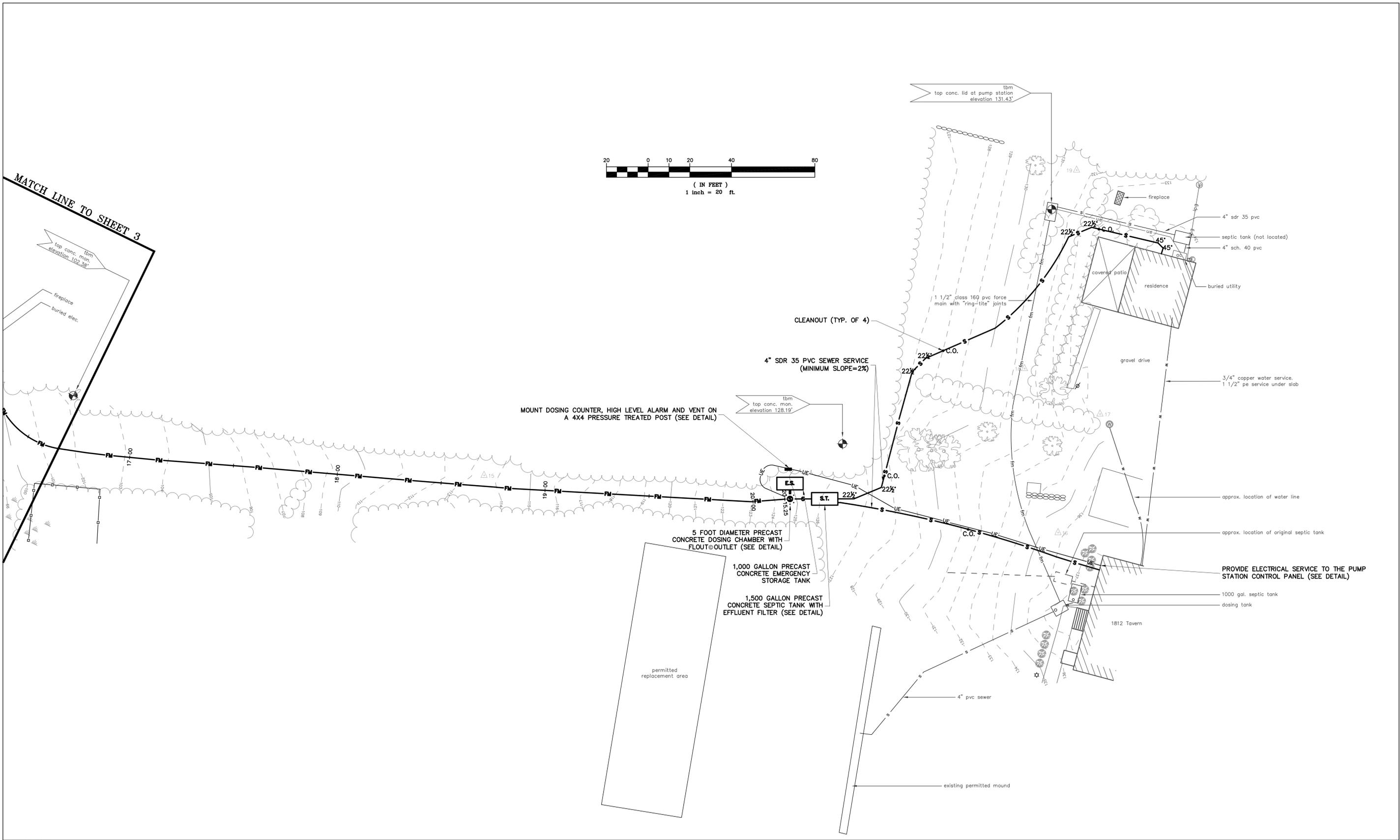
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HAPPY PATRICK
 1812 TAVERN
 SEPTIC SYSTEM IMPROVEMENTS
 CHURCH HILL ROAD
 CHARLOTTE, VERMONT

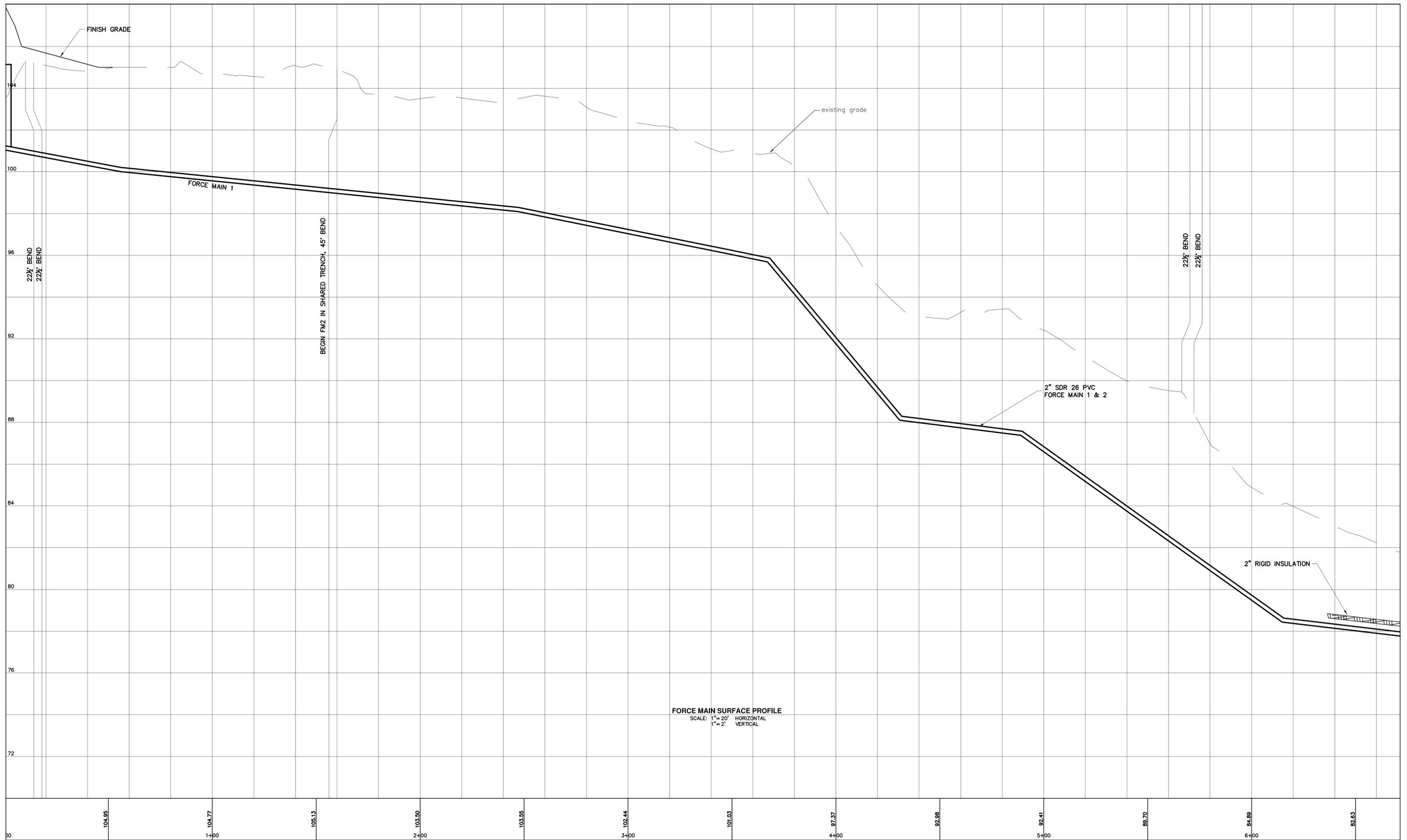
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SITE PLAN



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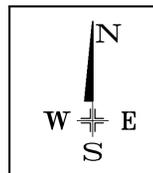
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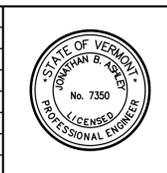
FORCE MAIN SURFACE PROFILE
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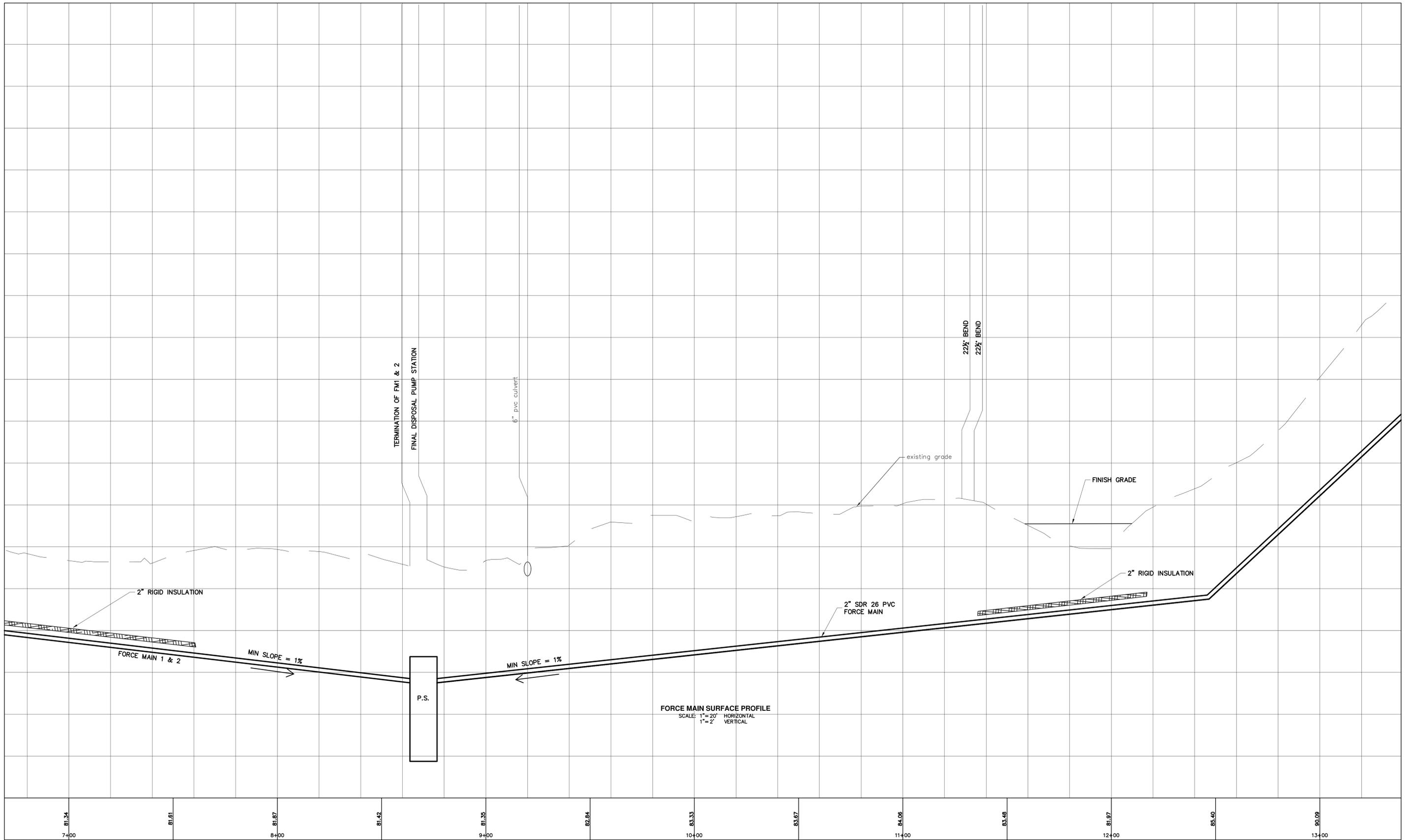


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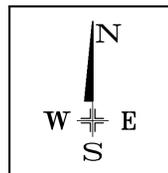
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 CHURCH HILL ROAD
 CHARLOTTE, VERMONT
 FORCE MAIN PROFILE

SCALE: 1" = 20'	DR. BY: JS/JM	SHEET NO. 5 OF 9	DWG. NO. 89049tpo
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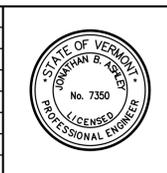


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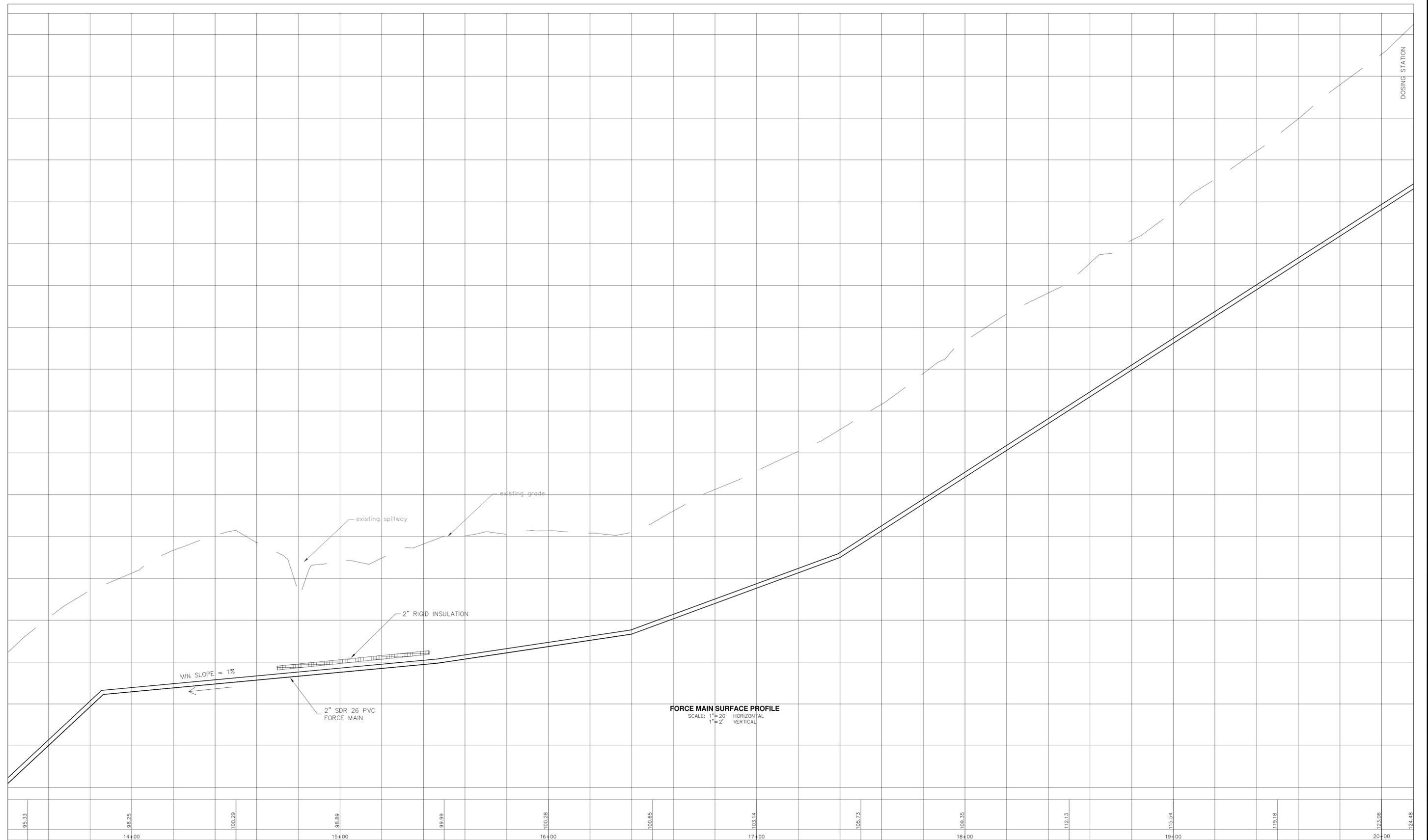


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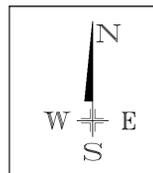
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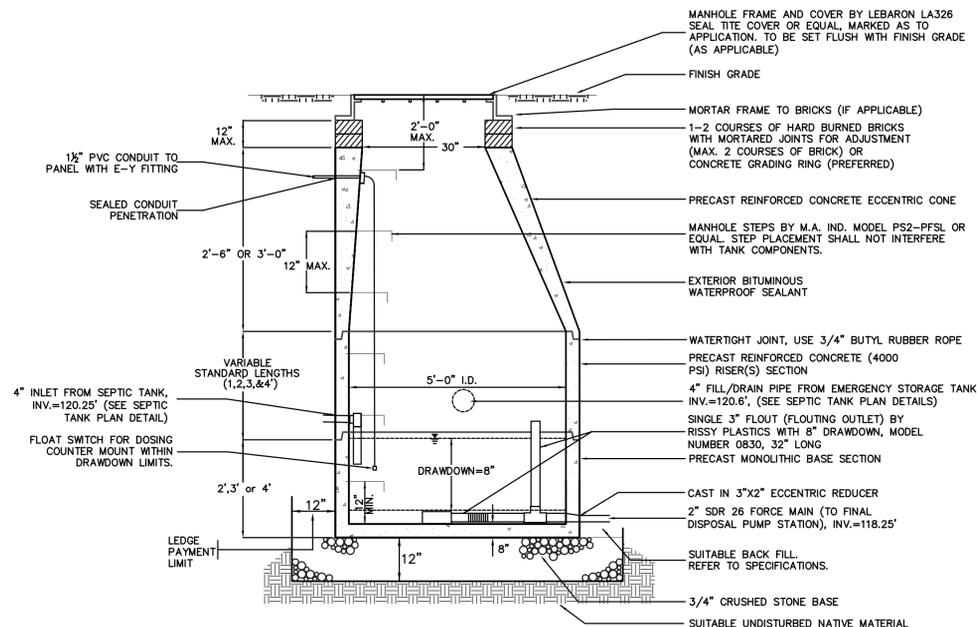


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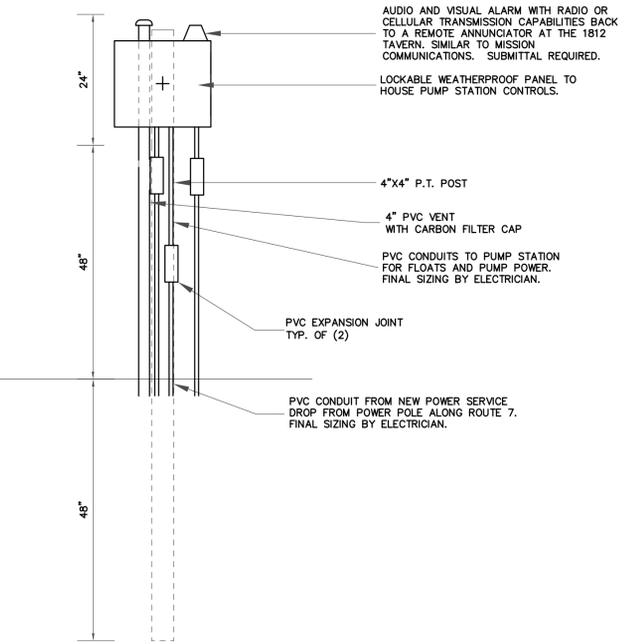
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 1812 TAVERN
 SEPTIC SYSTEM IMPROVEMENTS
 CHURCH HILL ROAD
 CHARLOTTE, VERMONT
FORCE MAIN PROFILE



DOSING CHAMBER SECTION
NOT TO SCALE



PUMP STATION PANEL
SCALE: N.T.S.

PUMP STATION INSTALLATION INSTRUCTIONS

- A) TANK SHALL BE SET LEVEL ON BASE OF 8 INCHES OF GRAVEL, COMPACTED IN 4 INCH LIFTS. LEVELING COURSE OF 2 INCHES OF SAND ON TOP OF GRAVEL IS PERMITTED.
 - B) INSPECTIONS AND CLEANOUT OPENINGS TO BE SEALED WITH ASPHALTIC MASTIC BEFORE COVERING.
 - C) TANK TO BE PLACED AS SHOWN.
 - D) MEASURE AND RECORD LOCATION OF CLEANOUT FOR FUTURE LOCATION.
- GENERAL**
- A) ALL PIPE AND TANK WORK SHALL BE SET AND CHECKED WITH A TRANSIT OR ACCURATE BUILDER'S LEVEL.
 - B) ALL PENETRATIONS SHALL BE CAST-IN-PLACE "LOCKJOINT" FLEXIBLE MANHOLE SLEEVE WITH STAINLESS STEEL CLAMP, OR APPROVED EQUAL.
 - C) EXTERIOR OF STRUCTURES SHALL BE COATED WITH AN APPROVED BITUMINOUS COATING.
 - D) CONCRETE STRUCTURES SHALL BE COMPLETELY BACKFILLED WITH CLEAN 3/4" CRUSHED STONE.
 - E) PUMP STATION MAY BE RELOCATED FOR CONSTRUCTABILITY WITH ENGINEER APPROVAL.
 - F) ALL TURNS IN THE FORCE MAIN TO BE ACCOMPLISHED WITH 45° OR LESS BENDS.

GENERAL NOTES:

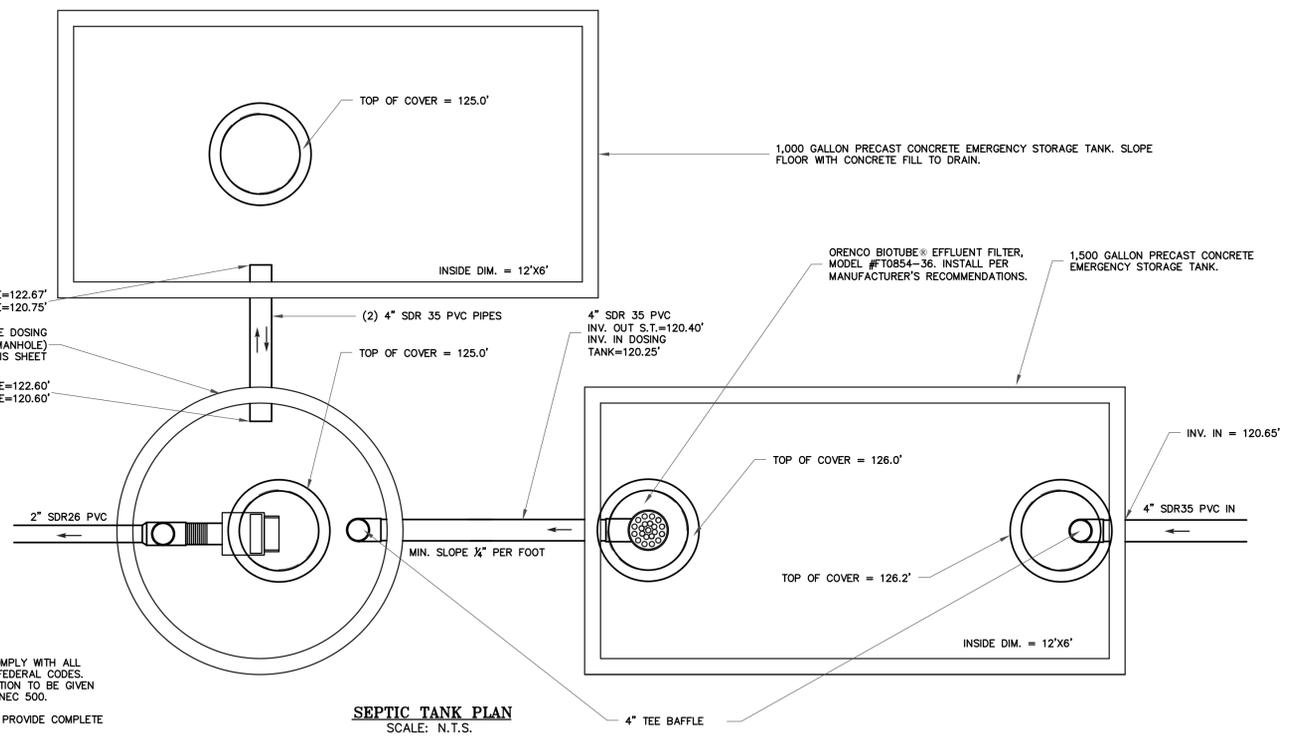
1. LAYOUT OF PIPING IS DIAGRAMMATIC AND CAN BE MODIFIED IN THE FIELD FOR CONSTRUCTABILITY WITH ENGINEER REVIEW AND APPROVAL.
2. ALL WORK TO CONFORM TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES.
3. INTENT OF DRAWINGS, PLANS, AND SPECIFICATIONS IS NOT TO LIST EVERY PIECE OF HARDWARE AND LABOR TASK REQUIRED. CONTRACTOR SHALL PROVIDE COMPLETE WORKING SYSTEM.
4. CONTRACTOR RESPONSIBLE FOR ALL SAWCUTTING, DEMOLITION, CORING OF FOOTINGS, ETC. NECESSARY TO ACCOMPLISH INSTALLATION OF PIPING AND EQUIPMENT AS SHOWN IN PLAN AND DETAIL VIEW.
5. CONTRACTOR RESPONSIBLE FOR UTILITY COORDINATION WITH EXISTING ELECTRICAL/PLUMBING/ETC. PRIOR TO COMMENCING WORK.
6. CONTRACTOR RESPONSIBLE FOR REPAIRING ANY UTILITIES DAMAGED DURING CONSTRUCTION OF NEW WORK.
7. CONTRACTOR RESPONSIBLE FOR REMOVAL AND OFF-SITE DISPOSAL OF ALL MATERIALS UNSUITABLE FOR RE-USE/BACKFILL. FOLLOW MANUFACTURERS' GUIDELINES IN INSTALLATION OF ALL EQUIPMENT AND MATERIALS.
8. WHERE EQUIPMENT, PIPING, OR ANY ANCILLARY EQUIPMENT IS SHOWN, SCOPE OF WORK SHALL INCLUDE ALL DEMO, SUPPORT, AND FINISH WORK NECESSARY TO COMPLETE INSTALL.
9. ALL PIPING INSIDE PUMP STATION SHALL BE SCH 80 PVC SUITABLE FOR POTABLE WATER, AS MANUFACTURED BY CHARLOTTE PIPE AND FOUNDRY OR APPROVED EQUAL.
10. ALL BALL VALVES SHALL BE PVC AS MANUFACTURED BY SPEERS OR APPROVED EQUAL.
11. ALL NEW PIPING TO BE HYDROSTATICALLY TESTED PER VT EPR CHAPTER 1 9-29-07.
12. ALL PIPING SHALL BE CAPPED DURING CONSTRUCTION TO PREVENT MATERIALS FROM ENTERING.
13. ALL PIPING SHALL BE SUPPORTED WITH ADEQUATE PIPE SUPPORTS TO PREVENT SAGS AND BENDS.
14. WIRE ALL CONTROLS AND EQUIPMENT TO MEET MANUFACTURERS' RECOMMENDATIONS AND SPECIFICATION.
15. VERIFY ALL VOLTAGES AND AMPERAGES BEFORE FINAL CONNECTION.
16. PROVIDE OVERLOAD PROTECTION AND DISCONNECTING MEANS AS REQUIRED BY ALL LOCAL, STATE, AND FEDERAL CODES.
17. ALL ELECTRICAL HARDWARE TO BE NEMA 3R.
18. ELECTRICAL CONTRACTOR TO SIZE ALL CONDUIT, WIRING, HARDWARE, AND OVERLOAD PROTECTION PER NEC.
19. CONTRACTOR TO RESTORE SITE TO MATCH PRE-CONSTRUCTION CONDITIONS UNLESS OTHERWISE NOTED. THIS INCLUDES STOCKPILE AREAS, RELOCATED MATERIALS, PLANTINGS, AND ALL OTHER MATERIALS AS DETAILED AND NOTED IN PLANS AND SPECIFICATIONS.

PUMP STATION CONTROL NOTES:

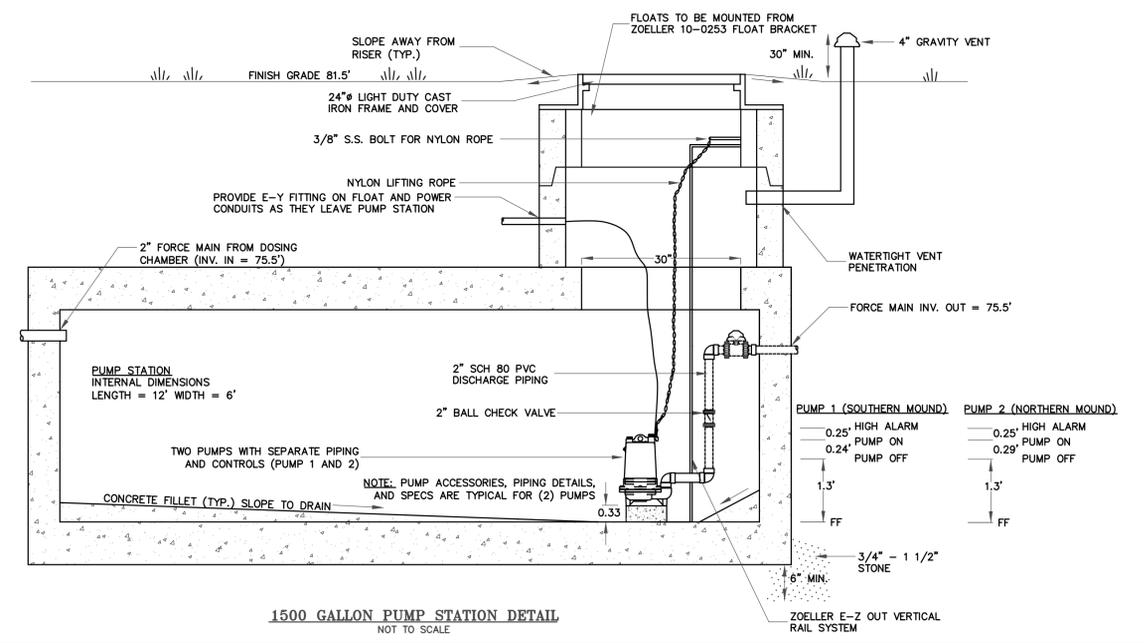
- CONTRACTOR SHALL PROVIDE HARDWARE, SENSORS, AND SOFTWARE TO ACCOMPLISH THE FOLLOWING.
- A) RUN PUMP 1 AND PUMP 2 ALTERNATING LEAD WHICH WILL OPERATE BETWEEN DIFFERENT HIGH AND LOW SETPOINTS.
 - B) SHUTDOWN PUMPS AT SETPOINTS.
 - C) SOUND VISUAL AND AUDIO ALARM AT HIGHPOINT.
 - D) TRACK RUN TIME FOR EACH PUMP.
 - E) TRACK NUMBER OF CYCLES FOR EACH PUMP (ON/OFF)
 - F) PROVIDE MUTE BUTTON FOR AUDIBLE PORTION OF ALARM BOTH OUTSIDE AND INSIDE CONTROL PANEL.
- CONTROL POINTS SHALL BE PROVIDED AS FOLLOWS
- PUMP #1
DO ON/OFF
- GENERAL
DI PUMP OFF
DI PUMP ON
DI HIGH LIMIT ALARM
DO TROUBLE CONTACT FOR REMOTE MONITOR
- PUMP #2
DO ON/OFF
- GENERAL
DI PUMP OFF
DI PUMP ON
DI HIGH LIMIT ALARM
DO TROUBLE CONTACT FOR REMOTE MONITOR

ELECTRICAL NOTES:

1. ALL WORK TO COMPLY WITH ALL LOCAL STATE AND FEDERAL CODES. SPECIAL CONSIDERATION TO BE GIVEN TO NFPA 820 AND NEC 500.
2. CONTRACTOR TO PROVIDE COMPLETE WORKING SYSTEM.
3. ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL WIRE SIZES AND HARDWARE PRIOR TO INSTALLATION. ALL WIRE AND HARDWARE TO BE SIZED PER NEC CODE BASED ON FINAL EQUIPMENT SELECTION.
4. ALL ELECTRICAL HARDWARE TO BE MOUNTED OUTSIDE SHALL BE IN NEMA 3R ENCLOSURE FOR OUTDOOR CONDITIONS.
5. PROVIDE BREAKERS FOR EXISTING PANEL TO FEED LOADS AS SHOWN.
6. PROVIDE GFCI OUTLET TO BE FED FROM GFCI BREAKER.
7. PROVIDE WEATHERPROOF AUDIBLE AND VISUAL NOTIFICATION HARDWARE FOR HIGH ALARM LEVEL.
8. PROVIDE STARTERS, RELAYS, OR CONTACTORS AS NECESSARY TO START AND STOP PUMPS FROM CONTROL SIGNAL.
9. ELECTRICAL CONTRACTOR TO COORDINATE FULLY WITH CONTROLS CONTRACTOR PRIOR TO STARTING WORK OR ORDERING HARDWARE.
10. ALL CONTRACTORS TO COORDINATE FULLY BETWEEN TRADES PRIOR TO STARTING WORK. PREPARE COORDINATION DRAWINGS AS NECESSARY TO PREVENT INTER TRADE CONFLICTS.
11. CONTRACTOR TO PROVIDE ALL INTERCONNECTS BETWEEN POWER AND CONTROL PANEL, AS NECESSARY TO ACCOMPLISH WORK AS OUTLINED.
12. POWER FEED FOR PUMP STATION TO COME FROM NEW ELECTRICAL SERVICE DROP AT POWER POLE ALONG ROUTE 7.
13. PUMP ELECTRICAL AND FLOAT FEEDERS TO BE CONTINUOUS TO CONTROL PANEL.
14. ELECTRICAL CONTRACTOR TO RE-CALCULATE VOLTAGE DROP BASED ON FINAL FEEDER LENGTH AND SIZE FEEDER AND CONDUIT TO MAINTAIN LESS THAN 3% VOLTAGE DROP.



SEPTIC TANK PLAN
SCALE: N.T.S.

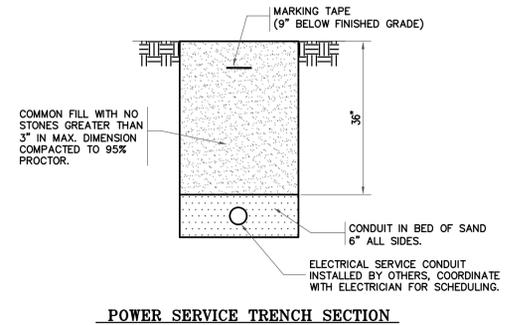
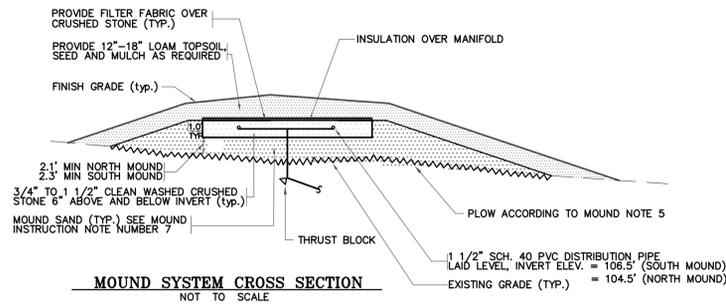
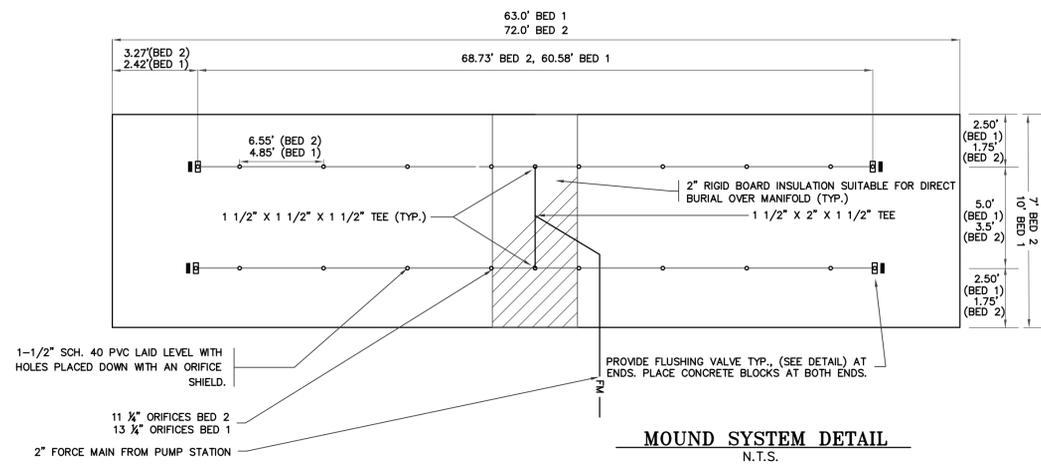


1500 GALLON PUMP STATION DETAIL
NOT TO SCALE

PUMP STATION AND SEPTIC TANK EQUIPMENT SCHEDULE

<p>PUMP STATION & SEPTIC TANK:</p> <p>PUMP STATION SHALL BE A 1500 GALLON PRECAST AS MANUFACTURED BY CAMP PRECAST OR APPROVED EQUAL STEEL REINFORCED CONC. SUBMITTAL REQUIRED. STANDARD OPENINGS AT EITHER END SHALL BE REPLACED WITH OPENINGS AS SHOWN ON THIS SHEET.</p> <p>GENERAL:</p> <p>ALL PENETRATIONS SHALL HAVE WATER TIGHT SNAP AND SEAL BOOTS WITH ALL JOINTS BETWEEN CONC. SECTIONS SHALL BE SEALED WITH 2" WIDE "E-Z STIK"</p> <p>EXTERIOR OF STRUCTURES SHALL BE COATED WITH AN APPROVED BITUMINOUS</p> <p>TESTING:</p> <p>ALL STRUCTURES SHALL BE TESTED FOR WATER TIGHTNESS PRIOR TO BACKFILLING. TEST SHALL BE CONDUCTED FOR 24 HOURS WITH CLEAN UNCONTAMINATED WATER. ALL VISIBLE LEAKS, WEEPS, AND SEEPS SHALL BE STOPPED USING AN APPROVED HYDRAULIC CEMENT. NO PARING OF INTERNAL JOINTS SHALL BE PERMITTED, WITH THE EXCEPTION</p> <p>CONCRETE STRUCTURES SHALL BE COMPLETELY BACK FILLED WITH MIN. 6" OF CLEAN 3/4"-1 1/2" CRUSHED STONE.</p>	<p>PUMP STATION PIPING:</p> <p>ALL PIPE AND FITTINGS FROM PUMPS SHALL BE SCH 80 PVC. ALL JOINTS WITHIN PUMP STATION SHALL BE SOLVENT WELD. FORCE MAIN SHALL BE 2" SDR 26 PVC. ENTIRE INSTALLATION SHALL BE TESTED ACCORDING TO VERMONT EPRS, CHAPTER 1, APPENDIX 1A, 1-A-05(g) AND 1-A-05(h). GRAVITY PIPING SHALL BE TESTED ACCORDING TO VERMONT EPRS, CHAPTER 1, APPENDIX 1A, 1-A-03(k).</p> <p>VALVES: BALL AND CHECK VALVES BY FLO CONTROL, INC. 2" CHECKMATE.</p> <p>SEWAGE PUMPS:</p> <p>PUMPS SHALL BE A GOULDS WE0718H 0.75hp, 208 VOLTS, 2" DISCHARGE OR APPROVED EQUAL. OPERATING POINTS: PUMP 1 = 28 GPM @ 48 FEET T.D.H. (SOUTHERN MOUND, FM1) PUMP 2 = 30 GPM @ 47 FEET T.D.H. (NORTHERN MOUND, FM2)</p> <p>NYLON LIFTING ROPE</p> <p>PROVIDE CONTINUOUS FEEDERS FROM PUMPS AND FLOATS TO CONTROL PANEL. PROVIDE EY CLASS 1 DIV 1 ELECTRICAL FITTING FOR EACH CONDUIT AS IT LEAVES PUMP STATION.</p>
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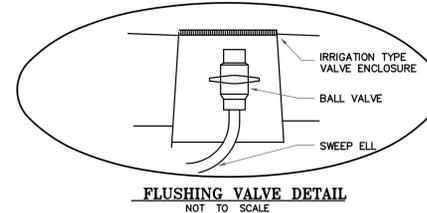
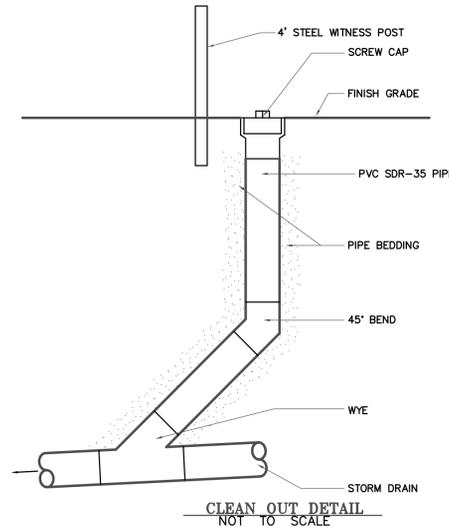
<p>REVISIONS</p>		<p>THE DRAWINGS FOR THIS PROJECT SHALL NOT BE REUSED OR ALTERED IN ANY WAY WITHOUT THE WRITTEN APPROVAL AND AUTHORITY OF THE ENGINEER. ANY REVISIONS SHALL BE MADE BY THE ENGINEER AND NOTED IN THE REVISION BLOCK.</p> <p>© 2008 PHELPS ENGINEERING, INC.</p>	<p>PHELPS ENGINEERING, INC.</p> <p>79 Court St., P.O. Box 367 Middlebury, Vt. 05753 Telephone (802) 388-7829</p>	<p>HAPPY PATRICK 1812 TAVERN SEPTIC SYSTEM IMPROVEMENTS CHURCH HILL ROAD CHARLOTTE, VERMONT</p>
<p>SCALE: SHOWN</p> <p>DATE: 8/1/08</p>	<p>DR. BY: JS/JM</p> <p>CK'D BY: JA</p>	<p>SHEET NO. 9 OF 9</p>	<p>DWG. NO. 89049DET</p>	<p>DETAILS AND NOTES</p>



- "MOUND" WASTEWATER DISPOSAL SYSTEM
SITE PREPARATION AND CONSTRUCTION NOTES
- THE FOLLOWING STEPS SHOULD BE TAKEN IN SEQUENTIAL ORDER:
- STAKE OUT THE SITE WITH ORIENTATION OF THE MOUND IN ACCORDANCE WITH THE PLANS. IN ADDITION TO SETTING CORNER STAKES, SET STAKES AT 10-FOOT TO 20-FOOT OFFSETS BECAUSE THE STAKES WILL MORE THAN LIKELY BE MOVED DURING CONSTRUCTION.
 - ALL MOUND ELEVATIONS SHALL BE REFERENCED TO THE BENCH MARK AS INDICATED ON THE PLANS. USE OF A CONSTRUCTION LEVEL IS NECESSARY.
 - ABOVE-GROUND VEGETATION SHALL BE CLOSELY CUT THROUGHOUT THE AREA TO BE UTILIZED FOR THE PLACEMENT OF THE FILL AND WITHIN 10 FEET OF THE EDGES AND TOE OF THE MOUND.
 - PRIOR TO PREPARING THE EXISTING GROUND, INSTALL THE FORCE MAIN FROM THE PUMP STATION TO THE POINT OF CONNECTION WITH THE DISTRIBUTION PIPING HEADER. NOTE: THIS PROCEDURE SHOULD BE FOLLOWED WHEN INSTALLING PRESSURE DISTRIBUTION SYSTEMS.
 - PREPARING THE EXISTING GROUND SURFACE: IN WOODED AREAS SCARIFYING MAY BE DONE. FOR SCARIFYING, CUT ALL TREES ENCLOSED BY THE CORNER STAKES OF THE MOUND OFF FLUSH WITH THE EXISTING GROUND. THEN SCARIFY THE EXISTING GROUND WITHIN THE ENCLOSED AREA WITH THE TEETH OF A BACKHOE BUCKET. PLOW THE AREA ENCLOSED BY THE CORNER STAKES TO THE MOUND USING A MOLD BOARD PLOW AND PLOW PERPENDICULAR TO THE DIRECTION OF SURFACE SLOPE WITH PLOW THROWING SOIL UPSLOPE. PLOW THE MAXIMUM DEPTH CAPABLE OF THE PLOW (7 TO 8 INCHES) USING AS LARGE A PLOW AS POSSIBLE TO REDUCE THE NUMBER OF DRIVEN IN FURROWS WHICH RESULT IN COMPACTION OF THE SUBSOIL. NOTE: PREPARE SOIL ONLY WHEN THE MOISTURE CONTENT IS LOW TO AVOID COMPACTION AND PUDDLING. IF A FRAGMENT OF SOIL OCCURRING APPROXIMATELY 9 INCHES BELOW THE SURFACE CAN BE EASILY ROLLED INTO A WIRE, THE SOIL SHOULD NOT BE PREPARED SINCE THE MOISTURE CONTENT IS TOO HIGH. IF, ON THE OTHER HAND, THE SOIL IS FRIABLE OR DRY AND FALLS APART WHEN ROLLING IT INTO A WIRE, THE SOIL CAN BE PREPARED BECAUSE THE DANGER OF CAUSING COMPACTION AND PUDDLING IS MINIMAL. ONCE COMPACTION AND PUDDLING OCCURS, IT REDUCES THE ABILITY OF THE SOIL TO ACCEPT WATER, THUS INCREASING THE CHANCE OF FAILURE. ONCE PREPARATION IS COMPLETE, KEEP ALL VEHICULAR TRAFFIC OFF THE PREPARED AREA. TRY TO AVOID THE OCCURRENCE OF A LONG PERIOD BETWEEN PREPARATION AND CONSTRUCTION. IF IT RAINS AFTER PREPARATION IS COMPLETED, WAIT UNTIL THE SOIL DRIES OUT BEFORE THE START OF CONSTRUCTION. IMMEDIATE CONSTRUCTION AFTER PREPARATION IS HIGHLY PREFERABLE.
 - UPON COMPLETION OF PREPARING THE MOUND AREA AND PRIOR TO THE PLACING OF THE FILL MATERIAL, THE ENGINEER SHALL INSPECT THE SITE PREPARATIONS.
 - FILL MATERIAL FROM THE NATIVE SOIL PREPARED SURFACE TO THE TOP OF THE TRENCHES OR BED SHALL BE OF SAND TEXTURE, WITH A SIEVE ANALYSIS PASSING VERMONT EPR RULES IN TABLE BELOW. A SAMPLE OF THE PROPOSED MOUND SAND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE ANY PLACEMENT OF THE PROPOSED SAND.

SIEVE NUMBER	PERCENT PASSING, BY WEIGHT	VT EPR	VT EPR
3/8	85-100%	1-913(c)(1)	1-913(c)(3)
4	95-100%	1-913(c)(2)	
8	80-100%		
16	50-85%		
30	25-60%		
40	25-75%	10-30%	30-50%
50	10-30%		
60	0-30%		
100	0-10%	2-10%	
200	0-5%		0-5%

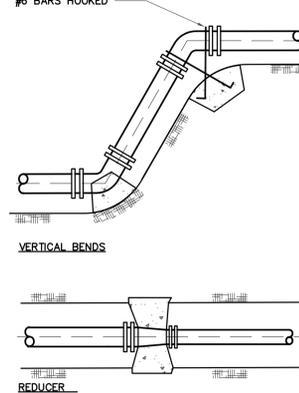
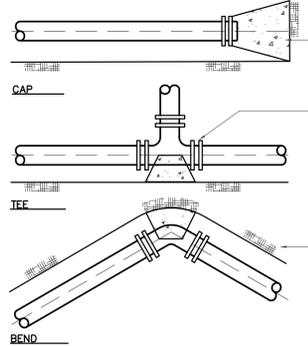
- PLACE THE SAND AROUND THE EDGE OF THE PREPARED AREA BY DUMPING IT ON THE PREPARED AREA, BUT KEEP THE WHEELS OF THE DUMP TRUCK OFF THE PREPARED AREA. WHEEL TRACKS IN THE PREPARED AREA WILL LEAD TO COMPACTION AND RUTS IN THE PREPARED AREA. THIS WILL ALLOW THE EFFLUENT TO FLOW IN THE RUTS WHICH WILL RESULT IN SEEPAGE.
- USING A CRAWLER TRACTOR WITH A BLADE, MOVE THE SAND INTO PLACE. TRY TO KEEP AT LEAST 6 INCHES OF SAND UNDER THE TRACKS TO MINIMIZE COMPACTION OF THE PLOWED LAYER.
- PLACE ALL THE SAND NEEDED TO THE GRADES INDICATED. SHAPE THE SIDES TO THE REQUIRED SLOPES.
- WITH A BACKHOE BUCKET, FORM THE ABSORPTION AREA, TRENCH(ES) OR BED BY MOVING ALONG THE LENGTH OF THE ABSORPTION AREA. MAKE SURE THE BOTTOM OF THE ABSORPTION AREA IS LEVEL. SOME HAND LEVELING WILL BE REQUIRED.
- AFTER HAND LEVELING OF THE ABSORPTION AREA, THE STONE SHALL BE PLACED INTO THE ABSORPTION AREA, HAND LEVELED AND THE DISTRIBUTION PIPE INSTALLED.
- THE ENGINEER SHALL DIRECT THE TESTING OF THE DISTRIBUTION SYSTEM.
- AFTER PLACEMENT OF THE DISTRIBUTION SYSTEM, PLACE A LAYER OF APPROVED FILTER FABRIC OVER THE ABSORPTION AREA.
- AFTER PLACEMENT OF THE FILTER FABRIC, THE ENTIRE MOUND SHALL BE COVERED WITH TOPSOIL NATIVE TO THE SITE, OR OF SIMILAR CHARACTERISTICS TO SUPPORT VEGETATION FOUND IN THE AREA. CROWN THE ENTIRE MOUND WITH COVER OF SOIL LESS PERMEABLE THAN THE MOUND FILL, COVERING 12 INCHES ON THE SIDE SLOPE, AND A MINIMUM OF 18 INCHES OVER THE MOUND. THE TOP 3 INCHES OF THIS COVER SHOULD BE TOPSOIL.
- THE ENTIRE MOUND SHALL BE SEED, SODDED, OR OTHERWISE PROVIDED WITH VEGETATION COVER TO ASSURE STABILITY OF THE SOIL.
- THE AREA SURROUNDING THE MOUND SHALL BE GRADED TO PROVIDE DIVERSION OF SURFACE RUN-OFF WATERS.



AREA OF BEARING FACE OF CONCRETE THRUST BLOCKS IN SQUARE FEET

PIPE SIZE (INCHES)	SOFT WET CLAY SAND OR SILT (1,000 PSF)		DRY SAND (3,000 PSF)		COMPACT SAND OR HARDPAN (5,000 PSF)	
	CAP OR TEE	90° BEND	45° BEND	22 1/2° BEND OR LESS	CAP OR TEE	90° BEND
8 OR LESS	20 sf	7 sf	4 sf	4 sf	4 sf	4 sf
10	29	10	5	5	5	5
12	41	14	7	7	7	7
8 OR LESS	27	9	5	5	5	5
10	41	14	7	7	7	7
12	58	19	11	11	11	11
8 OR LESS	15	5	3	3	3	3
10	22	8	5	5	5	5
12	31	11	7	7	7	7
8 OR LESS	8	3	2	2	2	2
10	16	5	3	3	3	3
12	22	8	5	5	5	5

NOTE: BEARING SURFACE AREAS CALCULATED ASSUMING A MAXIMUM WORKING PRESSURE OF 150 PSI AND A 2:1 SAFETY FACTOR FOR SURGE.



REVISIONS



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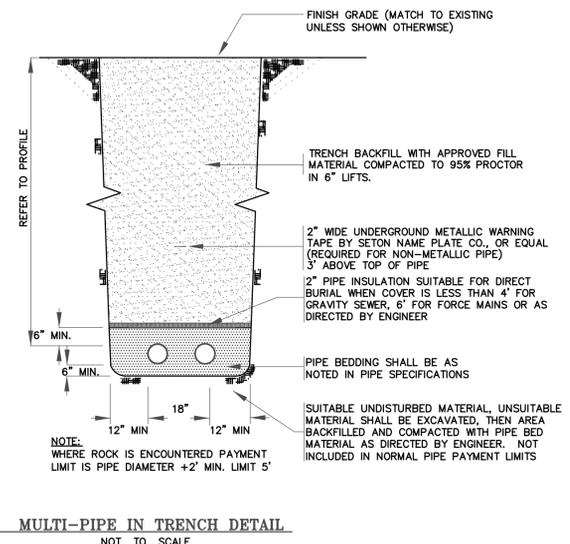
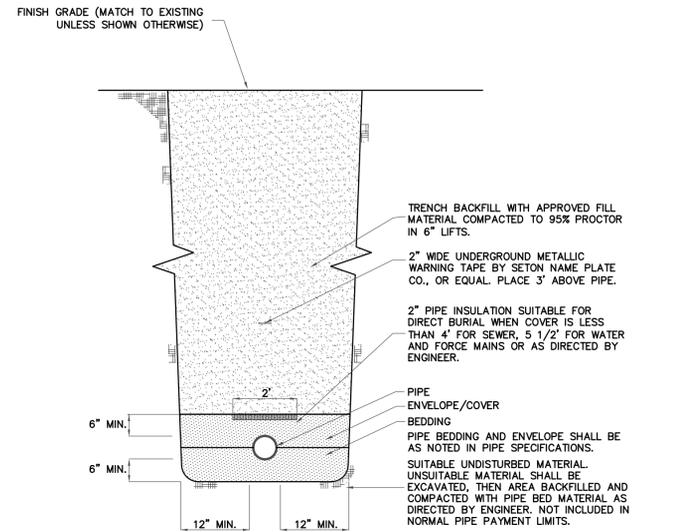
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SCALE: SHOWN DR. BY: JS/AM SHEET NO. 8 OF 9 DWG. NO. 89049DE1
DATE: 8/1/08 CK'D BY: JA

HAPPY PATRICK
1812 TAVERN
SEPTIC SYSTEM IMPROVEMENTS
CHURCH HILL ROAD
CHARLOTTE, VERMONT

DETAILS AND NOTES



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